

is a little more in proportion to the white, and in some individuals the bill is furnished with two processes in the upper mandible, like the young of the preceding species, except that the bars on the two middle feathers in the tail are continuous.

NOTE.—The day after the above paper was read, two mature specimens were received from Iceland; they are male and female, and have just come through the moult, and correspond exactly in the markings with the breeding individuals brought by Mr. Proctor; they are, however, a little brighter in colour, occasioned principally by the freshness of the plumage, and certainly do not vary more than might be expected from the difference in the young from the same nest. I may also observe that all the mature specimens I have seen from Iceland, amounting to *seven* in number, have the upper mandible furnished with two processes; whilst in the many Greenland specimens I have examined, only two have had the double process, and these were apparently very old individuals.

EXPLANATION OF THE PLATE.

- A. Tail-feather of young *Falco Islandicus*. B. Primary of mature ditto.
 D. Lesser wing-covert feather of ditto.
 E. Primary of mature *Falco Grælandicus*. F. Tail-feather of young ditto. G. Covert feathers of mature ditto.

XXVIII.—*On the Land and Freshwater Mollusca of Algiers and Bougia.* BY EDWARD FORBES.

[With Plates*.]

DURING a visit to the regency of Algiers in May 1837, I obtained forty-five species of land and freshwater Mollusca, chiefly collected in the neighbourhood of the city of Algiers and of the town of Bougia (in the province of Constantine). M. Michaud, a distinguished French naturalist, published the year before a pamphlet entitled, ‘Catalogue des Testacés vivans envoyés d’Alger, par M. Rozet,’ in which he enumerates twenty-five species of land and freshwater shells; but a great part of these are not correctly speaking from Algiers, but from Oran (near Morocco), where the Fauna of Barbary assumes a different aspect, approximating to that of the Canaries on the one hand, and to that of Spain on the other.

* These plates will form part of the SUPPLEMENT.





Fig. 3.



Fig. 2.

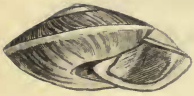


Fig. 1.



Of the shells enumerated in M. Michaud's Catalogue, I believe the following do not occur either in the province of Titérie (Algiers) or in that of Constantine. *Helix cariosula*, *soluta*, *alabastrites*, and *Hieroglyphicula* (all new species of M. Michaud), *Helix vermiculata*, *Carthusiana*, *albella*, *zaphirina*, and *conspurcata*. *Bulimus radiatus*, *Cyclostoma Voltzianum* (new) and *ferrugineum* (new).

Among the forty-five species collected by myself, there are several which I have reason, after careful research, to believe undescribed, and have accordingly given them names except in the case of two species of *Limax*.

LIMAX.

1. *Limax cinereus*. Gardens near Algiers.

2. *Limax* —, with the body rounded, head and tentacula purple-grey, the back with two dark parallel stripes. Shield yellowish-grey, with two dark longitudinal stripes, not continuous with those of the body. Length, an inch and a half. At Bougia and on the hill of Budjaria near Algiers.

3. *Limax* —, with the back sharply carinate, grey; tentacula dusky; shield brownish-white, with grey markings. Length, one inch. At Bougia, rare.

HELIX.

4. *Helix aspersa*, Mull. Common at Algiers and Bougia. The colouring of the shell generally more vivid than in the European specimens and the size greater.

5. *Helix melanostoma*, Drap. Algiers, rare.

6. *Helix naticoides*, Drap. Not common at Algiers. Frequent at Bougia, where it abounds on nettles, coming out from its retreat after a shower of rain. Grows to a larger size than in Europe.

7. *Helix lactea*, Mull. Thickets about Algiers; common.

8. *Helix Constantina*, nov. sp. Pl. XI. fig. 1.

H. testa subglobosa, imperforata, alba, rufo-fasciata; fauce alba: labro expanso, margine reflexo; columella gibba.

Animal purplish-grey; foot yellowish-white; tentacula long, slender. In waste places among nettles at Bougia.

9. *Helix candidissima*, Drap. On the hill of Budjaria near Algiers, abundant.

10. *Helix Otthiana*, nov. sp. Pl. XI. fig. 2.

Helix orbiculato-depressa, alba, longitudinaliter striata, profunde umbilicata : anfractibus quinque, ultimo carinato marginato ; apertura angulata, peristomate subreflexo ; columella reflexa.

Breadth 1 inch ; height $\frac{1}{4}$.

Animal very dark grey ; tentacula short, obtuse. On rocks at Bougia, abundant. I have named this very distinct species after my friend and companion in travel Dr. Otth of Berne.

11. *Helix Terverii*, Michaud. Animal blueish-grey above with four darker longitudinal stripes ; tentacula blueish-grey.

On the *Chamærops humilis* at Algiers and Bougia in great abundance.

12. *Helix cæspitum*, Drap. Algiers, frequent.

13. *Helix pisana*, Mull. Algiers, abundant on the aloes near the sea-shore.

14. *Helix variabilis*, Drap. Algiers and Bougia, common.

15. *Helix pyramidata*, Drap. On Mount Budjaria near Algiers, and at Bougia, plentiful.

16. *Helix conoides*, Drap. On the aloes at Algiers.

17. *Helix conica*, Drap. Sandy places by the sea at Algiers.

18. *Helix elegans*, Drap. At Bougia, abundant.

19. *Helix Rozetti*, Michaud. Animal yellowish-white, with four grey longitudinal stripes ; tentacula grey. Under stones on Mount Budjaria.

20. *Helix lenticula*, Ferr. Under stones at Algiers and Bougia.

21. *Helix lucida*, Drap. Two specimens from the rejectamenta of the river Haresh, near Algiers.

22. *Helix cellarea*, Mull. On old walls at Bougia, a remarkably flattened form.

23. *Helix apicina*, Lam. Under stones by the sea at Algiers. This species is sometimes hairy.

24. *Helix roseo-tincta*, nov. sp. Pl. XI. fig. 3.

Helix orbiculato-convexa, depressiuscula, pallide cornea, pellucida, perforata, pilosa, pilis per series longitudinaliter dispositis ; apertura subrotunda, labro interne marginato, roseo-tincto, peristomate simplici ; apice glabro, papillato.

Br. $\frac{1}{2}$ inch ; height $\frac{5}{10}$.

Var. β . lævis.

Animal (of both varieties) slender, yellowish-grey; upper tentacula slender, dark towards the apex; lower tentacula grey; tail acute. On rocks near Algiers, and on walls at Bougia.

BULIMUS.

25. *Bulimus decollatus*, Drap. Not rare at Algiers. Common at Bougia; at Monkey mountain near Bougia the crevices of the rocks are often filled with broken shells of this species and *Achatina Poireti*, perhaps collected by the monkeys for food. The *Bulimus decollatus* grows to a much larger size in North Africa than in Europe. I have specimens an inch and a half long.

26. *Bulimus acutus*, Drap. Common at Algiers and Bougia.

27. *Bulimus ventricosus*, Drap. In moist places on the plain of the Metidja, but not so frequent as the last species.

28. *Bulimus pupa*, Farr. Common at Algiers. The animal is of a uniform dark grey colour.

29. *Bulimus Terverii*, Dupotet, Pl. XII. fig. 1. MSS. A very distinct and interesting species discovered near Bougia by Capt. Dupotet, and named by him after M. Terver of Lyons. In form it connects *Bulimus acutus* with *Bulimus obscurus* and *montanus*. Its colour is corneous with white irregular longitudinal stripes. I have taken it from the surface of rocks at Mount Goriah near Bougia.

ACHATINA.

30. *Achatina Poireti*, Ferr. (*A. algira*, *Philippi*; *Bulimus algirus*, *Brugière*.) Rare at Algiers; more frequent at Bougia. The animal is of a bright orange colour.

31. *Achatina acicula*, Lam. Among the rejectamenta of the river Haresh.

32. *Achatina follicula*, Lam. Frequent at Algiers, under stones, in dry places. Animal yellow with the upper tentacula and two longitudinal stripes on the back dark grey.

33. *Achatina nitidissima*, nov. sp. Pl. XII. fig. 2.

Achatina testa cylindræa, pellucida, lævissima, nitidissima, corneo-lutescente: apertura oblonga: anfractibus quinque, ultimo majore: apice obtuso.

Length $\frac{1}{4}$.